Transforming Poultry with Digital Solutions

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Cargill Micronutrition & Health Solutions

It's not new that digital innovation and technologies are being adopted across the different industries with different impacts. This is no different in poultry production and many advancements are being made to help optimize performance, promote profitability, and support long term sustainable goals.

Cargill's Animal Nutrition & Health (ANH) portfolio of digital solutions integrates cutting-edge technology with advanced nutritional science, enabling producers to make better, data-informed decisions. Solutions like Galleon™, Reveal™, and Panorama™ span from nutrient analysis to real time formulation and scenario planning. In combination with Cargill's technical service capabilities, producers can unlock the full potential of their operations.

Reveal™: Elevating Egg Production

As a global protein demand rises, Cargill ANH is committed to helping poultry producers optimize productivity and profitability while prioritizing the welfare of their hens. The poultry industry plays a vital role in meeting global nutritional needs by providing eggs—a nutrient-rich, affordable protein source essential for addressing the growing demand for animal protein. With Reveal™ Layers, Cargill introduces a non-invasive solution designed to address the challenges faced by modern egg producers.

Maintaining proper body composition is critical for long-term hen performance, supporting overall welfare, liver health, and nutrient metabolism—all crucial for sustained egg production. Excess fat accumulation can negatively impact laying performance and hen well-being, emphasizing the need for precise nutrition. Historically, the inability to non-invasively assess hens in the field posed significant challenges to achieving this balance. Backed by groundbreaking research and developed in collaboration with leading institutions, Reveal™ Layers uses advanced near-infrared (NIR) technology to provide real-time insights into poultry body condition, enabling producers to make precise, data-driven decisions.
Reveal™ Layers revolutionizes poultry management by making body condition monitoring as easy as 1-2-3:

1. Scan the hen: Using NIR light, the tool measures fat pads through the skin.

2. Collect results: Results are displayed on a mobile device in real time via Bluetooth.

3. Interpret results: Compare the flock's data to optimal ranges for the hens' age to make precise nutritional adjustments.

This process allows producers to enhance productivity while promoting animal welfare, as the tool eliminates the need for invasive assessments. By combining the insights provided by Reveal™ Layers with Cargill's nutritional expertise, producers can:

- Make real-time decisions: Adjust diet formulations based on flock insights to improve performance and reduce costs.
- Support long-term egg production: Optimize body condition to sustain productivity while maintaining hen immunity.
- Reduce feed costs: Enhance efficiency by tailoring diets to meet precise physiological needs.

Studies conducted in collaboration with Wageningen University highlight the importance of balancing dietary energy and lysine levels to promote laying persistency and overall productivity. Reveal™ Layers further enables producers to align feeding programs with these insights, ensuring consistent, high-quality egg yields.

This tool has been adopted in over 13 countries, underscoring its global appeal and effectiveness. Producers report potential increases of up to 20 eggs per hen housed over the productive cycle of up to 90 weeks, depending on the starting point of deployment and duration of use. Additionally, it supports extended laying periods of up to 10 weeks, increasing profitability while reducing costs associated with hen replacement. With a potential ROI of 15:1, even a 1% improvement in egg production can significantly enhance revenue.

Reveal™ Layers is more than just a tool; it's a game-changer for poultry producers. By delivering real-time data on body composition, it empowers producers to make informed decisions that enhance productivity, improve profitability, and prioritize animal welfare. With Reveal™ Layers, Cargill redefines the future of egg production, ensuring that healthy hens remain at the heart of meeting global protein demands.

Galleon™: Navigating the Poultry Microbiome

In today's competitive poultry industry, understanding the intricate world of gut microbiota can be a game-changer for performance, sustainability and to mitigate food safety challenges. However, unraveling the interaction between the chickens' gut microbiota, the factors impacting it and field results using traditional linear models can be a complex task. For that reason, we developed Galleon™. Galleon™ is a pioneering AI-powered platform that provides easy access to gut microbiota information, and practical recommendations on nutrition and farm management to address customers' challenges on performance, health, and food safety.

Galleon™ uses a unique database with over 60,000 microbiota analysis results across diverse scenarios in 23 countries around the globe to identify critical biomarkers, offering targeted, actionable recommendations on nutrition and farm management to advance poultry

production. This innovative tool enables producers to adapt feeding strategies according to the microbiota results, managing gut health proactively, and addressing performance and food safety challenges with unparalleled precision.

Just as ancient navigators used the stars to chart new frontiers, poultry producers can now navigate the intricate landscape of gut health with Galleon™. This revolutionary tool transforms the mysteries of the microbiome into actionable insights, offering a roadmap to optimize flock health, performance, and sustainability. By leveraging microbiome intelligence, producers can unlock hidden potential and implement targeted nutritional and management strategies that benefit their operations. With Galleon™ as your guide, the journey toward a healthy, efficient poultry future is within reach—proof that innovation and intelligence are the keys to charting a new course in poultry production.

Panorama™: Economic and Strategic Precision

Managing market volatility and maximizing profit require clear, confident decision-making. Panorama™ offers a flexible scenario-planning platform tailored to broiler producers. It enables users to explore various economic strategies by creating custom scenarios that represent potential market shifts and production changes.

With Panorama™, producers can align teams around shared goals by providing clear, data-backed recommendations. It connects seamlessly with the Cargill Nutrition System (CNS) for even more precise financial and nutritional insights, helping producers navigate market uncertainties with greater confidence.

Panorama™ also helps simplify complex production management. Its predictive modeling capabilities allow producers to anticipate operational challenges and adjust strategies accordingly. From nutrition planning to economic forecasting, Panorama™ empowers producers to stay ahead in an ever-changing market.

Driving the Evolution of Poultry Production

Cargill's Animal Nutrition digital solutions and micronutrition and health portfolio represents the next frontier in poultry production with innovation and leveraging our expertise at the center of this journey. Reveal™, Galleon™, and Panorama™ provide producers with the technological edge needed to make data-driven decisions, support operational efficiency, and secure sustainable growth in an increasingly competitive industry.

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